

$\Lambda_b(5912)^0$ $J^P = \frac{1}{2}^-$

Status: ***

Quantum numbers are based on quark model expectations.

$\Lambda_b(5912)^0$ MASS						
VALUE (MeV)	DOCUMENT ID	TECN	COMMENT			
5912.0±0.1±0.6	1,2 AAIJ	12AL LHCb	$p\bar{p}$ at 7 TeV			
1 Observed in $\Lambda_b(5912)^0 \rightarrow \Lambda_b^0 \pi^+ \pi^-$ decays with 17.6 ± 4.8 candidates with a significance of 5.2 sigma.						
2 AAIJ 12AL measures $m(\Lambda_b(5912)^0) - m(\Lambda_b^0) = 292.60 \pm 0.12 \pm 0.04$ MeV. We have adjusted the measurement to our best value of $m(\Lambda_b^0) = 5619.4 \pm 0.6$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.						

$\Lambda_b(5912)^0$ WIDTH				
VALUE (MeV)	CL%	DOCUMENT ID	TECN	COMMENT
<0.66	90	AAIJ	12AL LHCb	$p\bar{p}$ at 7 TeV

$\Lambda_b(5912)^0$ DECAY MODES				
Mode	Fraction (Γ_i/Γ)			
$\Gamma_1 \quad \Lambda_b^0 \pi^+ \pi^-$	seen			

$\Lambda_b(5912)^0$ BRANCHING RATIOS				
$\Gamma(\Lambda_b^0 \pi^+ \pi^-)/\Gamma_{\text{total}}$	Γ_1/Γ			
VALUE	DOCUMENT ID	TECN	COMMENT	
seen	AAIJ	12AL LHCb	$p\bar{p}$ at 7 TeV	

$\Lambda_b(5912)^0$ REFERENCES				
AAIJ	12AL PRL 109 172003	R. Aaij <i>et al.</i>	(LHCb Collab.)	

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NODE=B162M;LINKAGE=AI

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DESIG=1

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